

PATENT APPLICATION  
Serial No. 09/744,424  
Attorney Docket No. 1217-010064

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 2827 :  
In re Application of :  
Toshiyuki NAKAMURA et al. :  
Serial No. 09/744,424 :  
Filed January 24, 2001 :  
Examiner Kamand Cuneo :

**SHEET FOR FORMING A  
PRINTED WIRING BOARD**

Pittsburgh, Pennsylvania  
October 7, 2002

#14  
Gawlowg  
J. McMillan  
10/29/02  
RECEIVED  
OCT 21 2002  
TECHNOLOGY CENTER 2800

**LETTER TO OFFICIAL DRAFTSPERSON**

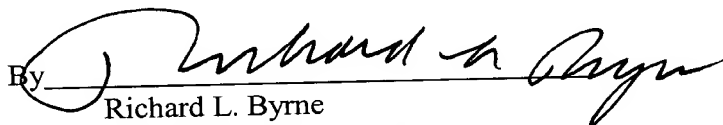
Commissioner for Patents  
Washington, D.C. 20231

Sir:

Attached hereto is one (1) set of formal drawings. Please substitute the enclosed drawings for the drawings currently filed in the above-identified application. Copies of the drawings with all changes highlighted in yellow are submitted herewith as required by MPEP § 608.02(v). The changes were made primarily to use proper cross hatching to indicate plastic materials and holes.

Respectfully submitted,

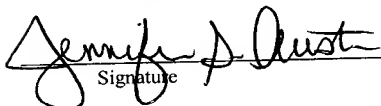
WEBB ZIESENHEIM LOGSDON  
ORKIN & HANSON, P.C.

By 

Richard L. Byrne  
Registration No. 28,498  
Attorney for Applicants  
436 Seventh Avenue  
700 Koppers Building  
Pittsburgh, PA 15219-1818  
Telephone: (412) 471-8815  
Facsimile: (412) 471-4094  
E-Mail: [webblaw@webblaw.com](mailto:webblaw@webblaw.com)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, Washington, D.C. 20231 on October 7, 2002.

Jennifer S. Austen  
(Typed Name of Person Mailing Paper)



10/07/2002  
Date



1/13

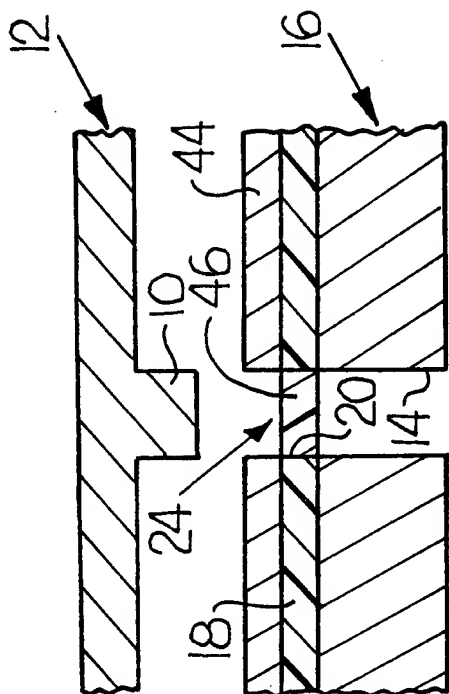


Fig. 1c

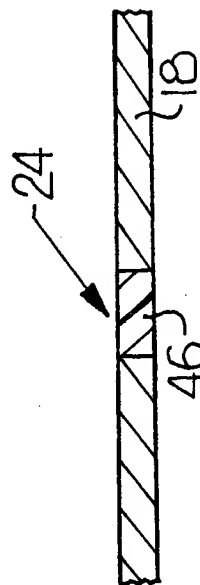


Fig. 1d

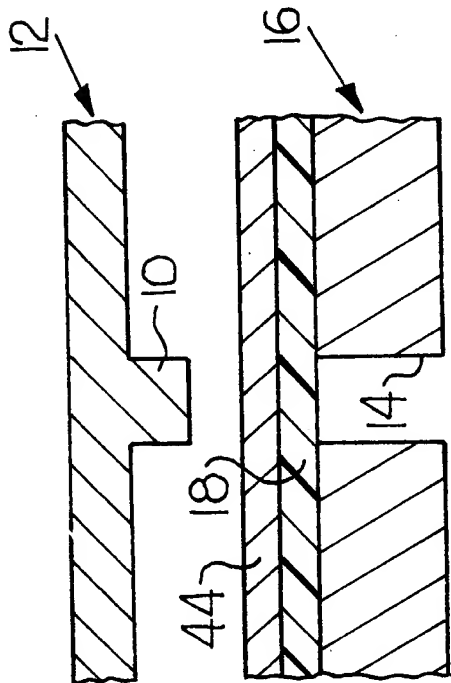


Fig. 1a

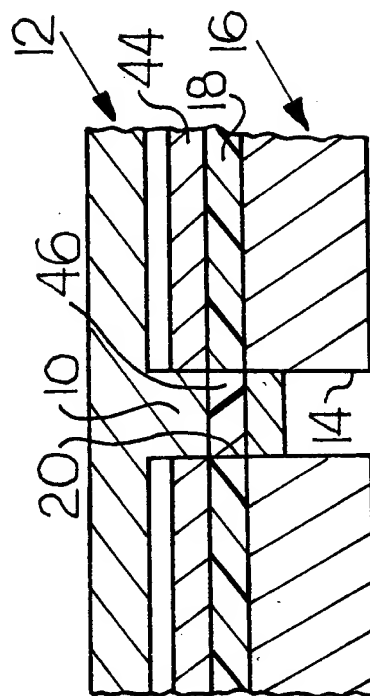


Fig. 1b

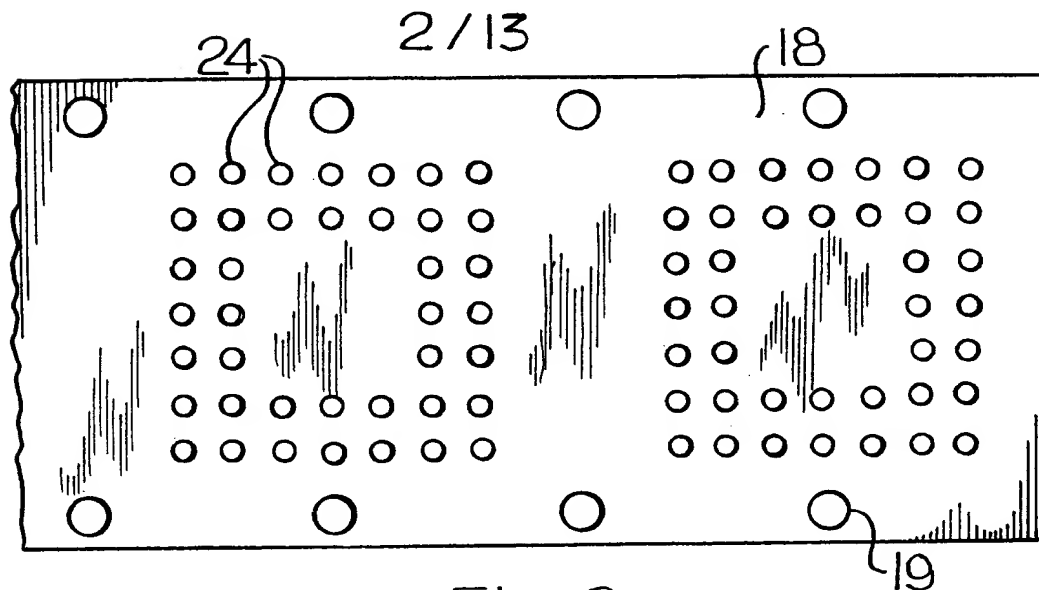


Fig. 2

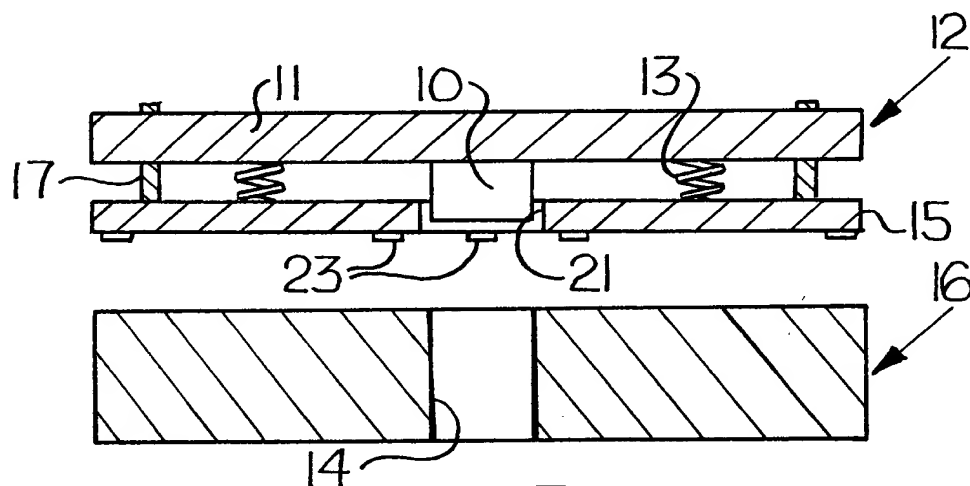


Fig. 3

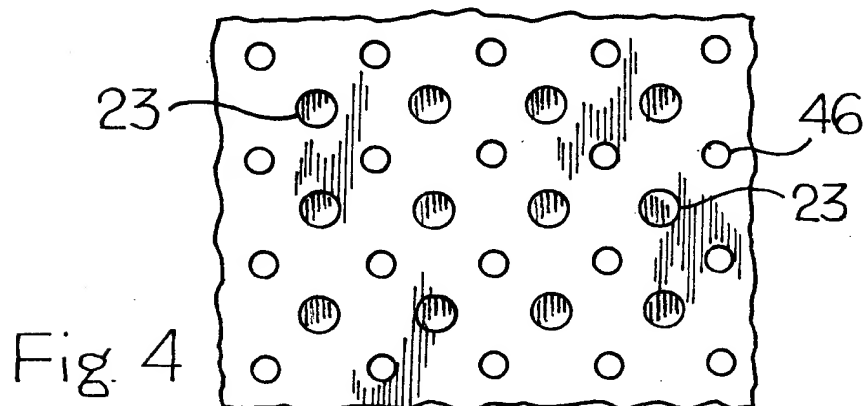


Fig. 4



3/13

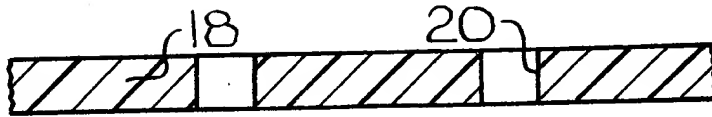


Fig. 5a

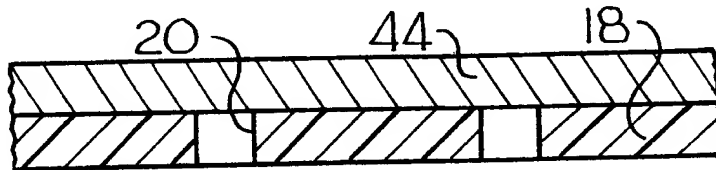


Fig. 5b

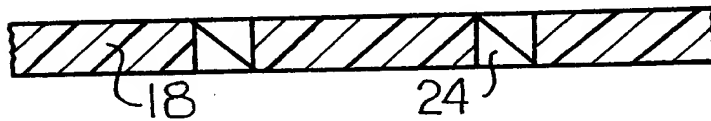


Fig. 5c

Fig. 6a

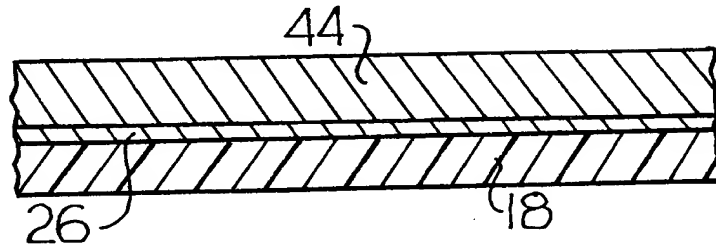


Fig. 6b

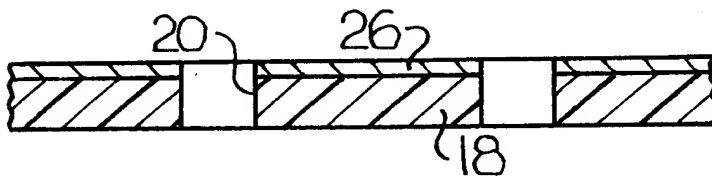
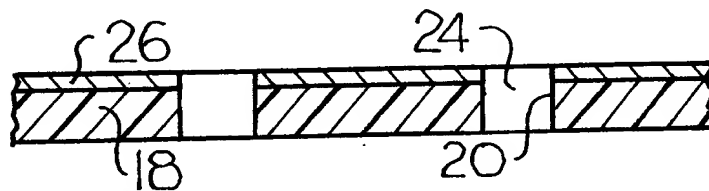


Fig. 7a

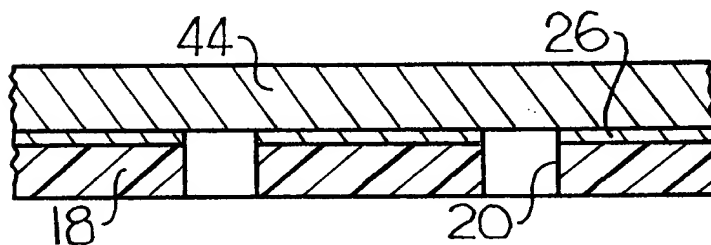


Fig. 7b

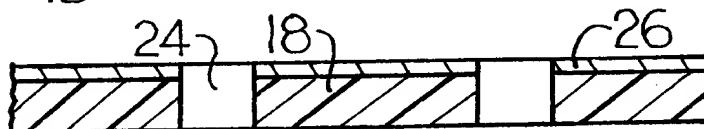
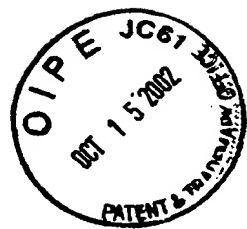


Fig. 7c



4/13

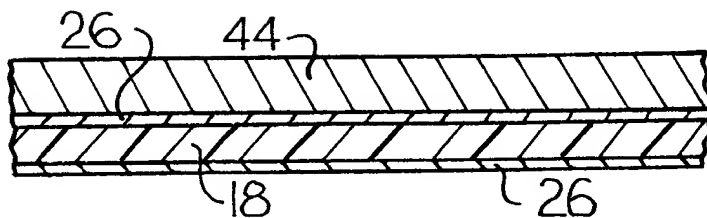


Fig. 8a

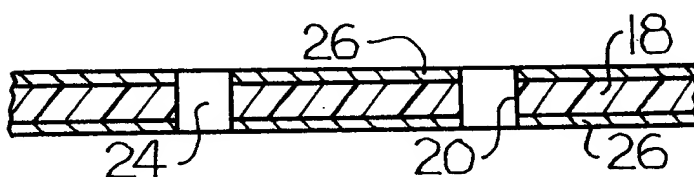


Fig. 8b

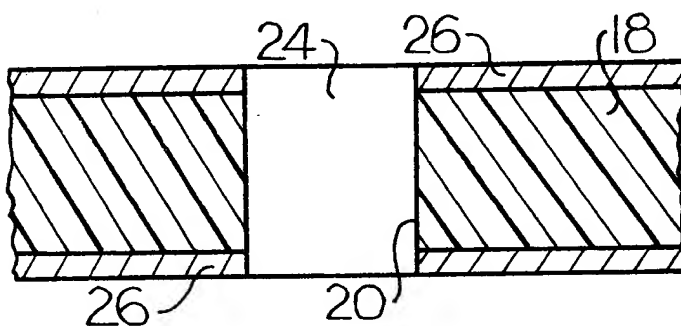


Fig. 8c

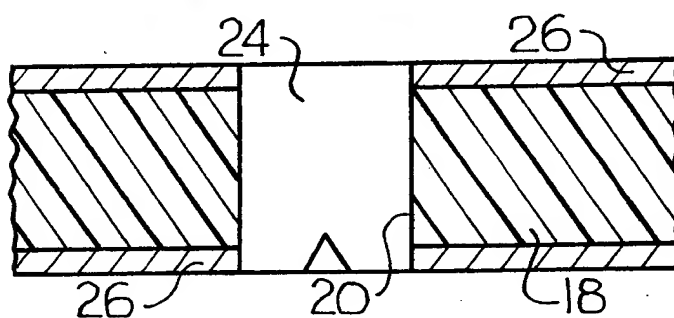


Fig. 8d

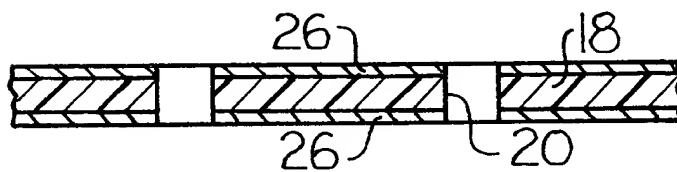


Fig. 9a

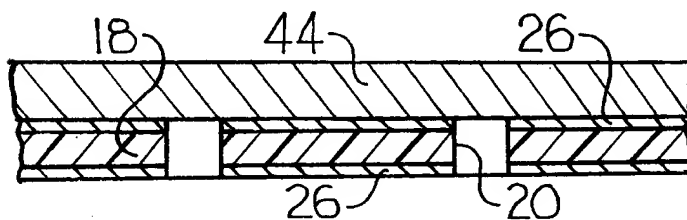


Fig. 9b



5/13

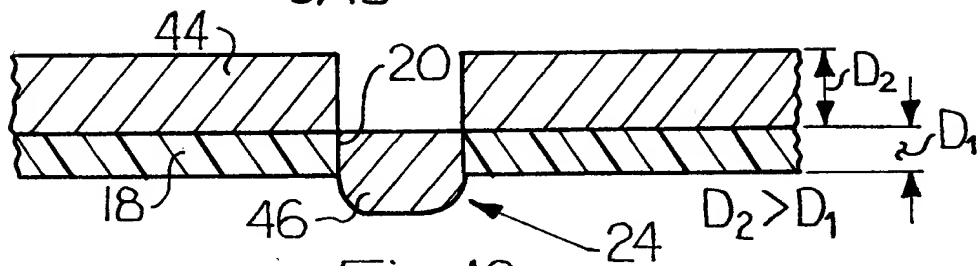


Fig. 10a

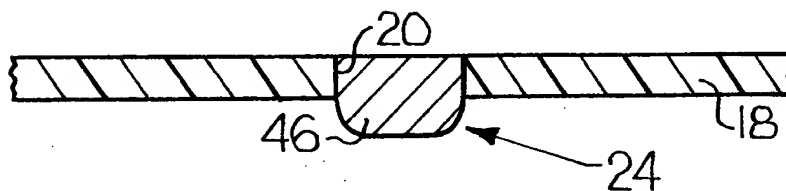


Fig. 10b

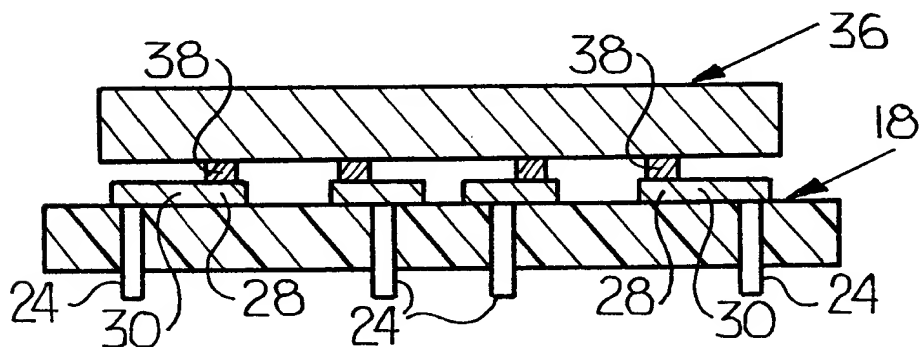


Fig. 11

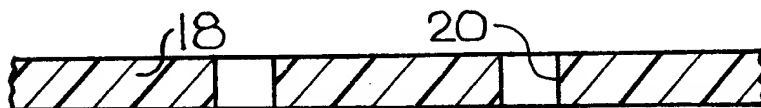


Fig. 12a

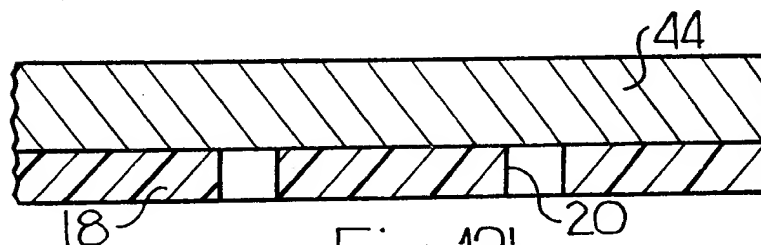
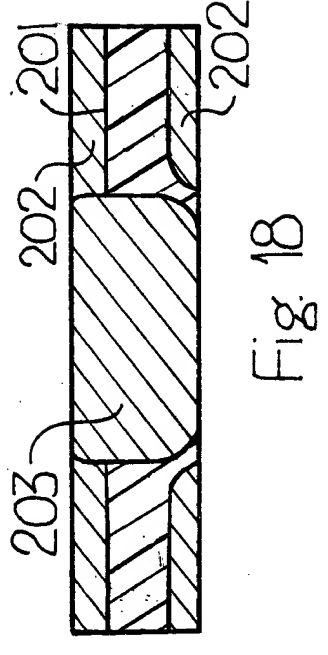
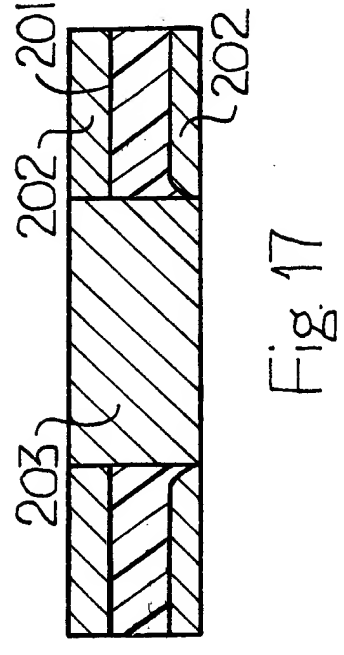
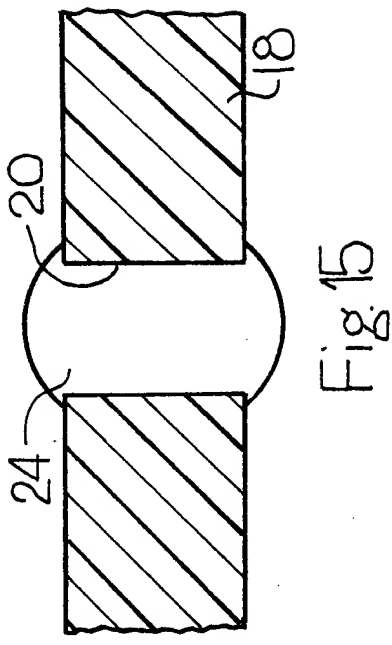
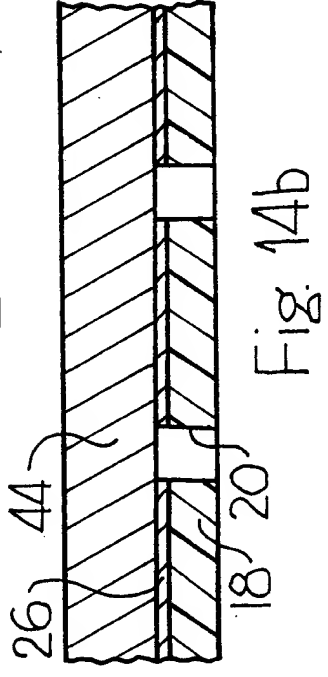
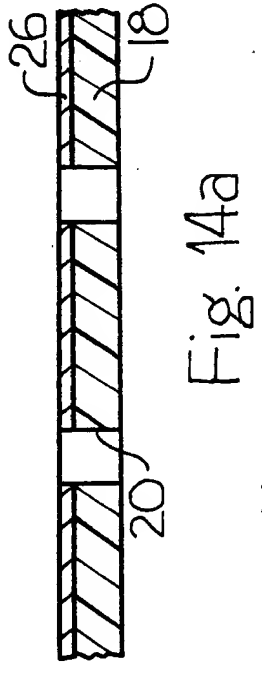
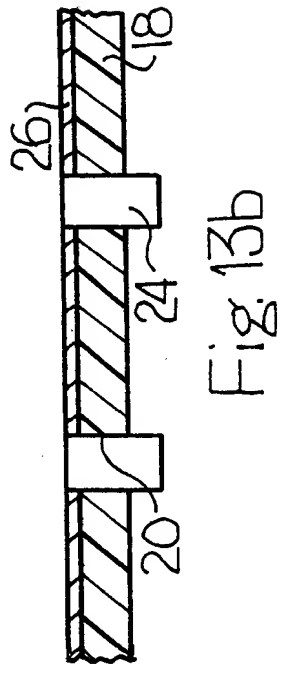
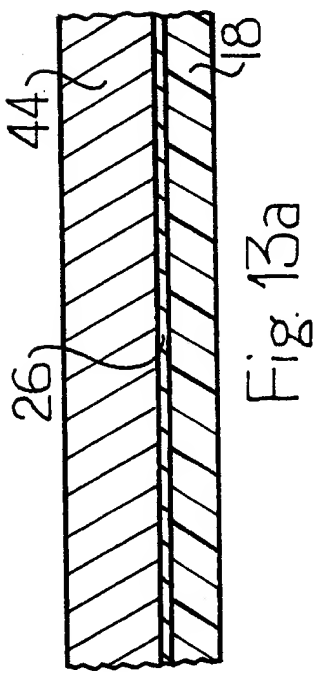
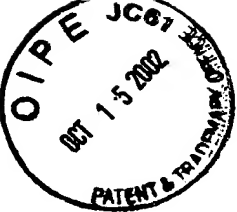


Fig. 12b





7/13

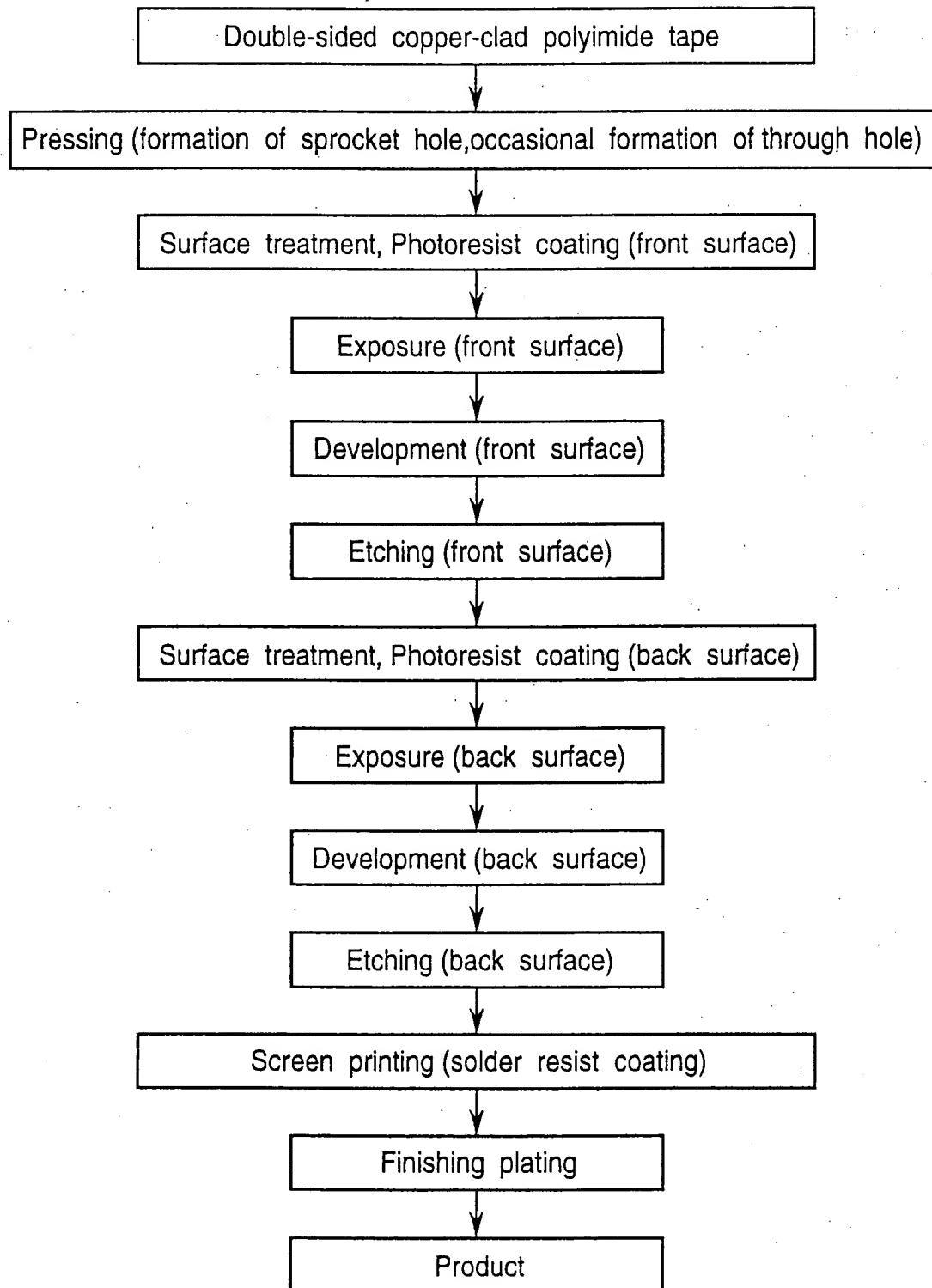
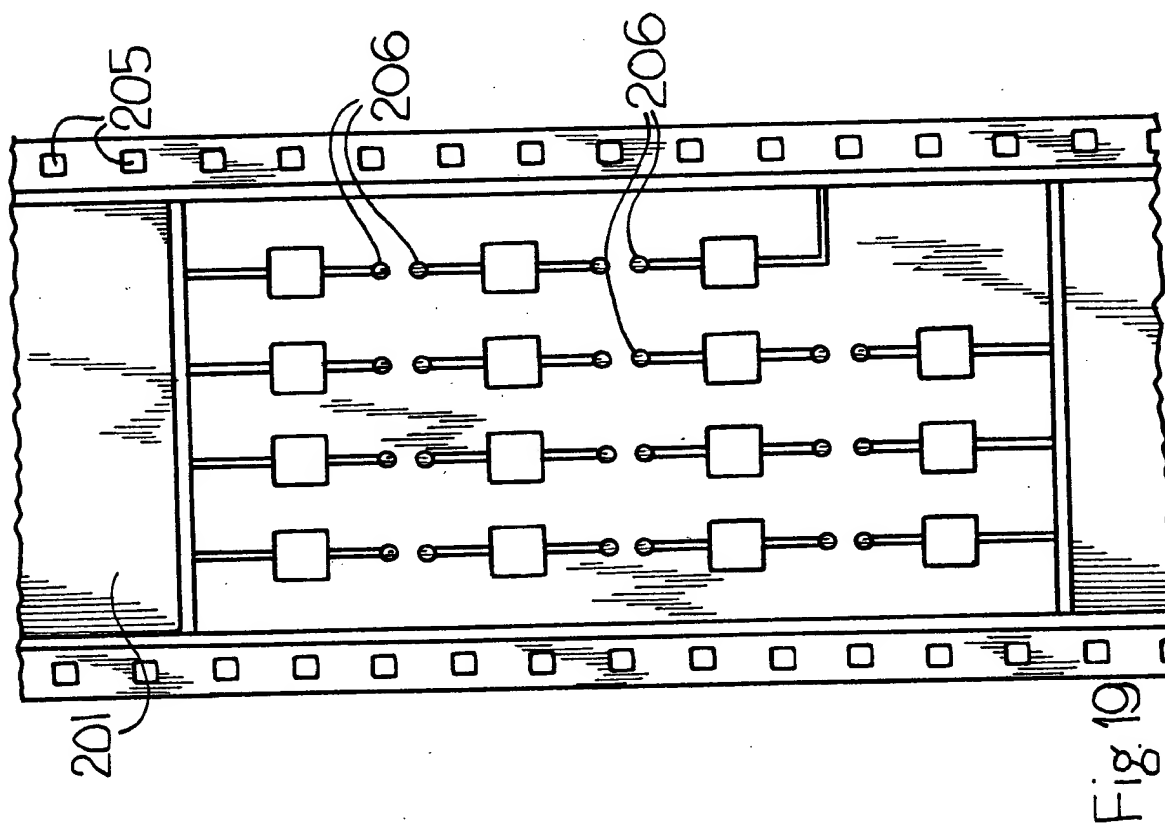
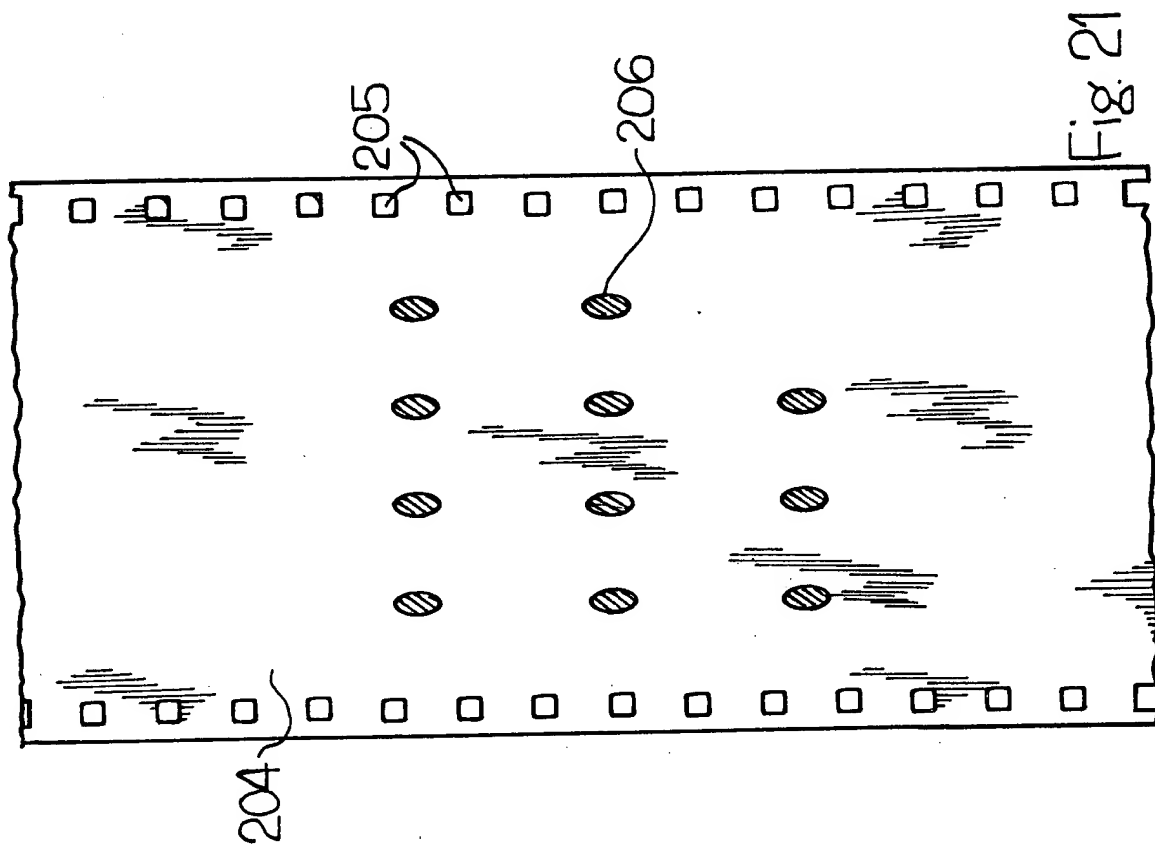


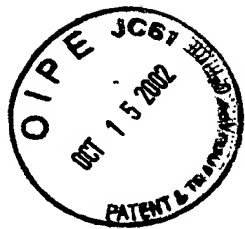
Fig. 16





8/13





9/13

Fig. 23a

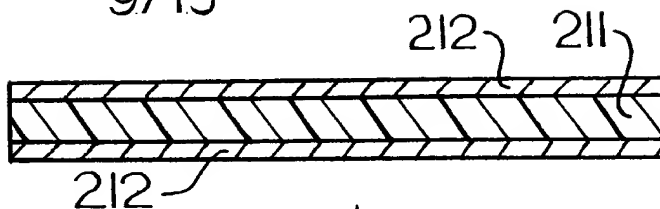


Fig. 23b

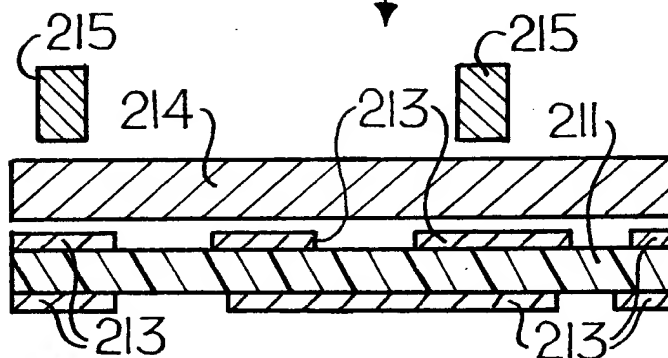
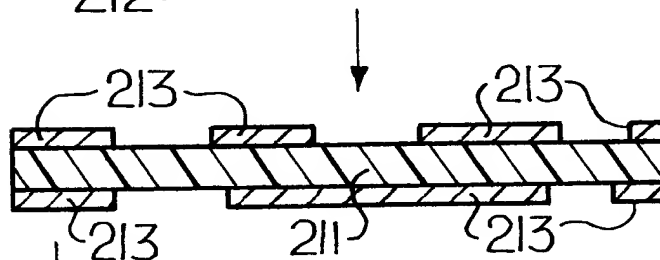


Fig. 23c

Fig. 23d

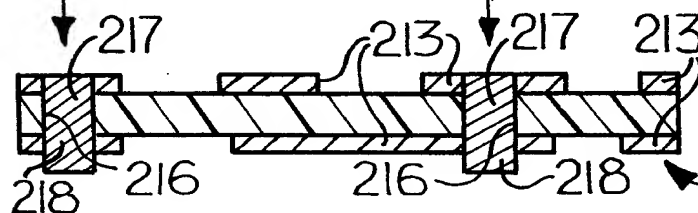
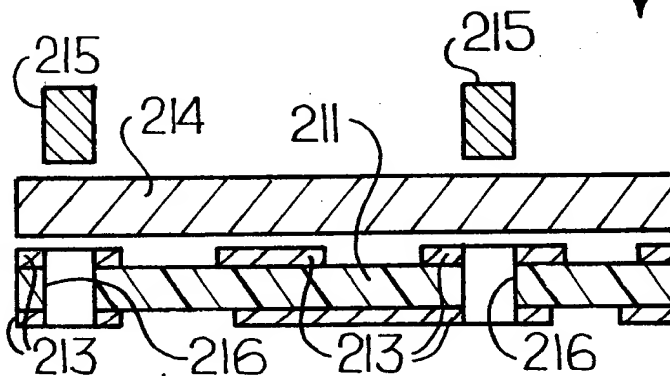


Fig. 23e



10/13

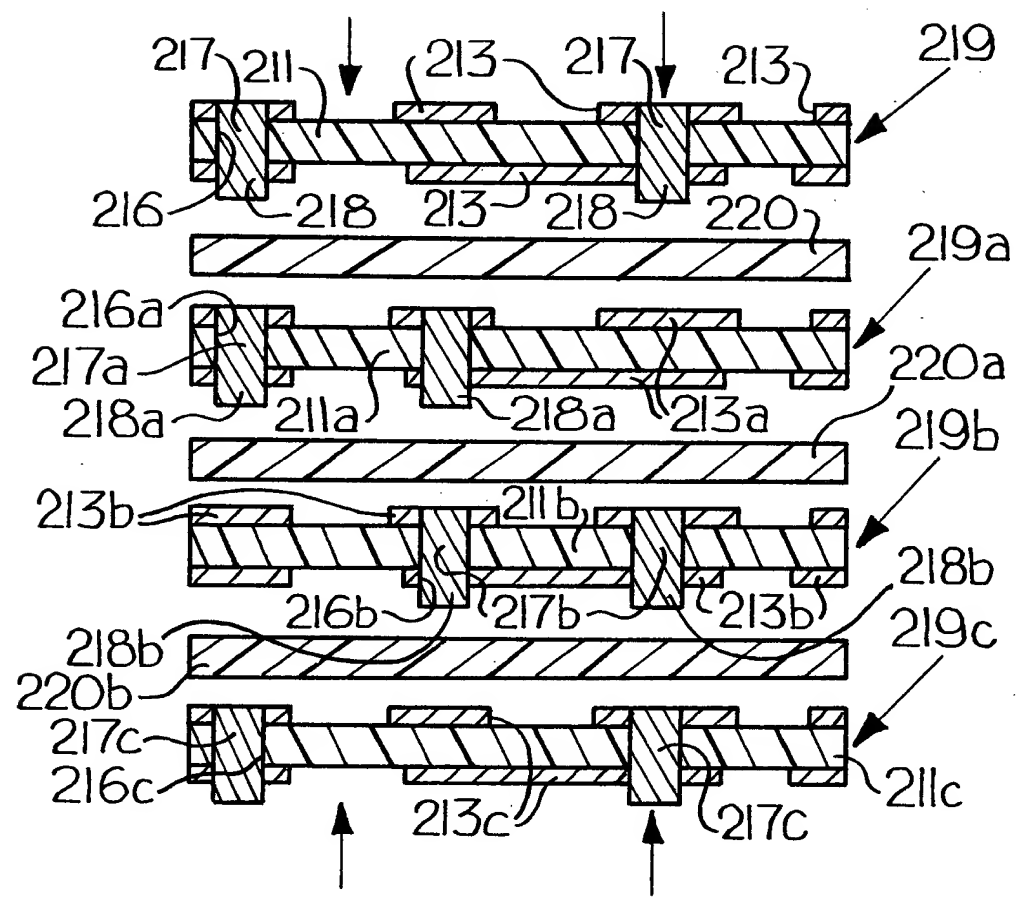


Fig. 24a

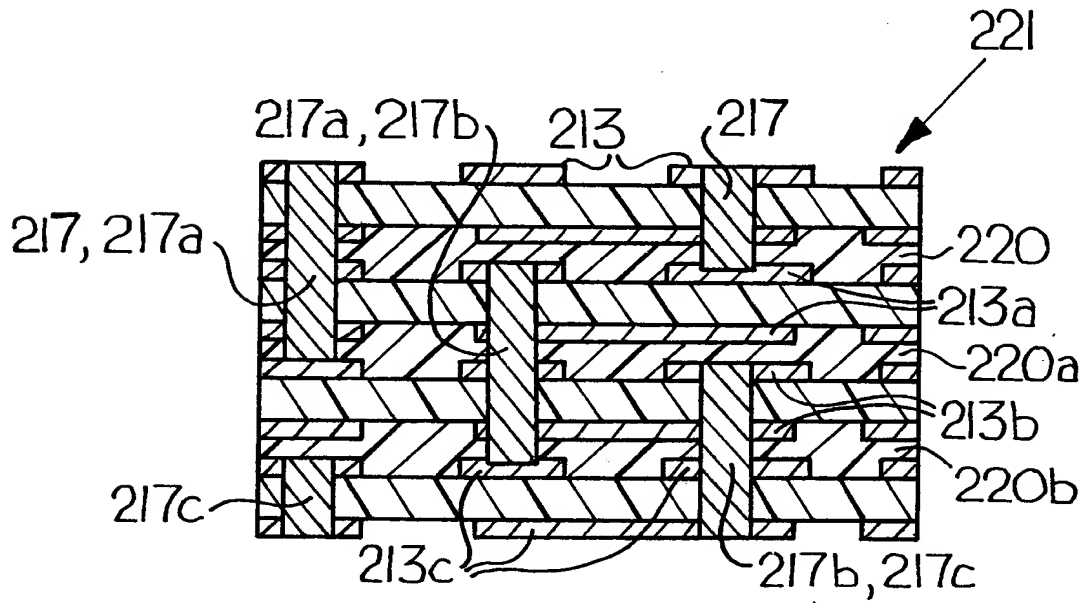


Fig. 24b

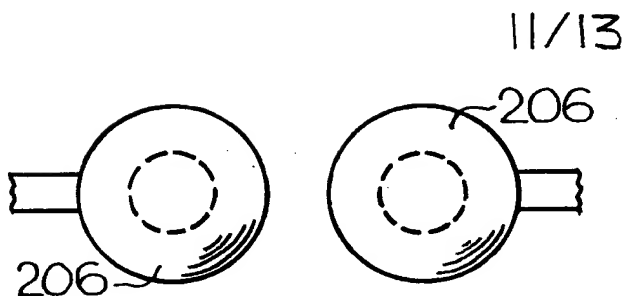
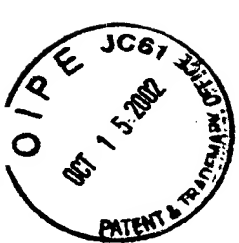


Fig. 20

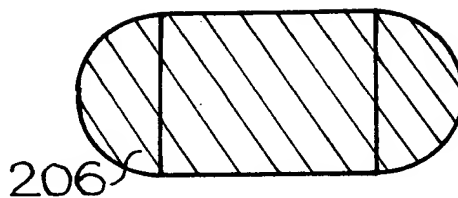


Fig. 22

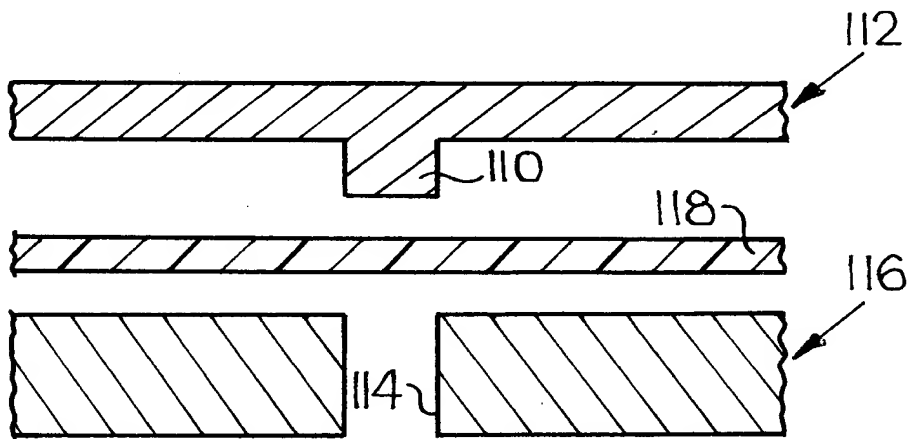


Fig. 25a (Prior Art)

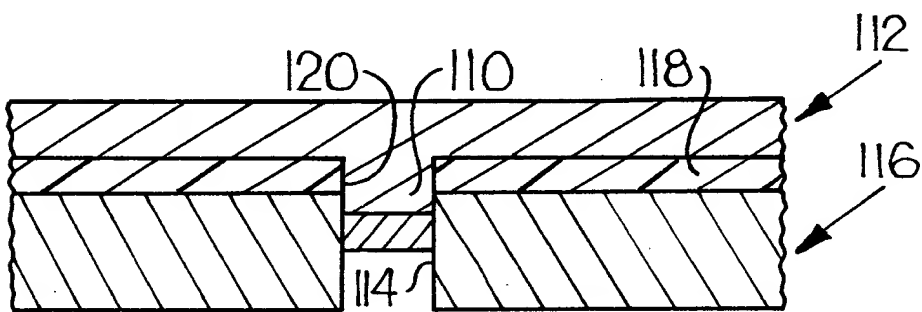


Fig. 25b (Prior Art)

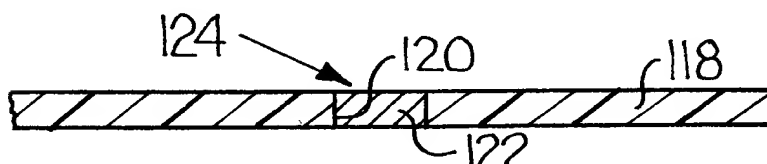
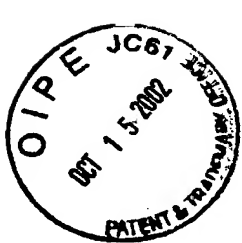


Fig. 25c (Prior Art)



12/13

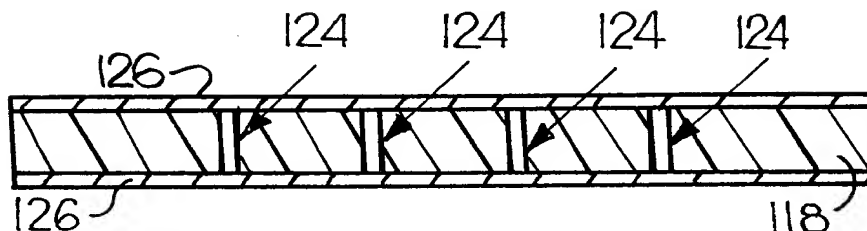


Fig. 26a (Prior Art)

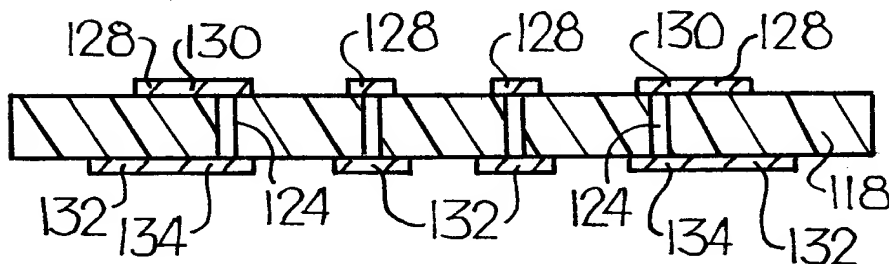


Fig. 26b (Prior Art)

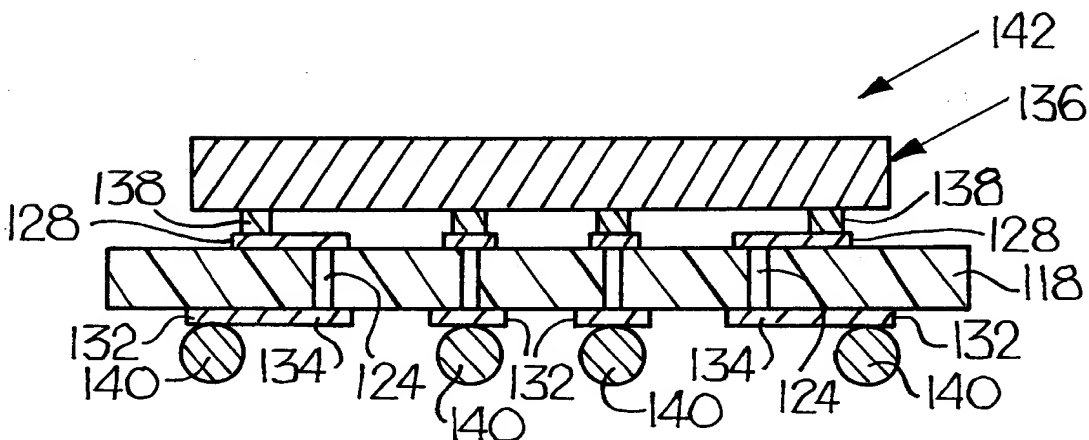


Fig. 26c (Prior Art)

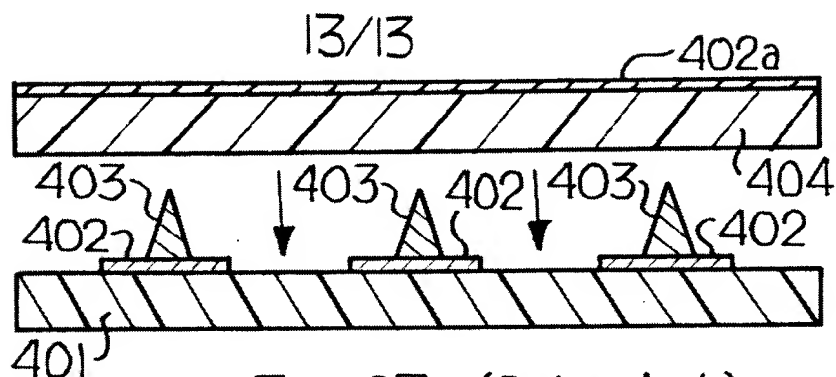


Fig. 27a (Prior Art)

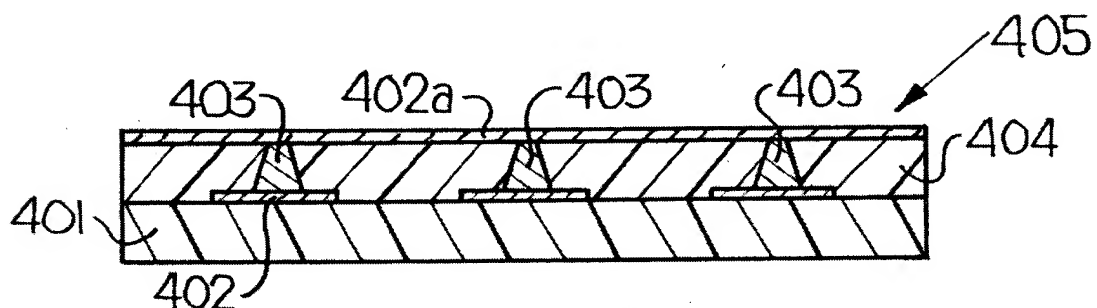


Fig. 27b (Prior Art)

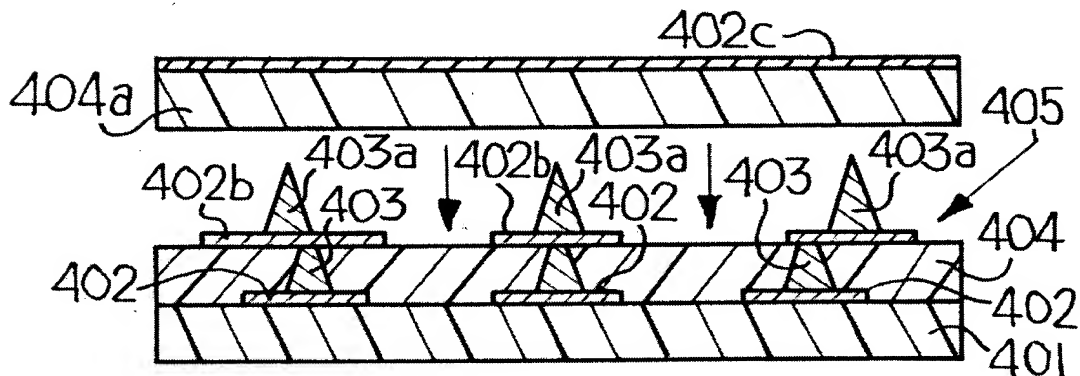


Fig. 27c (Prior Art)

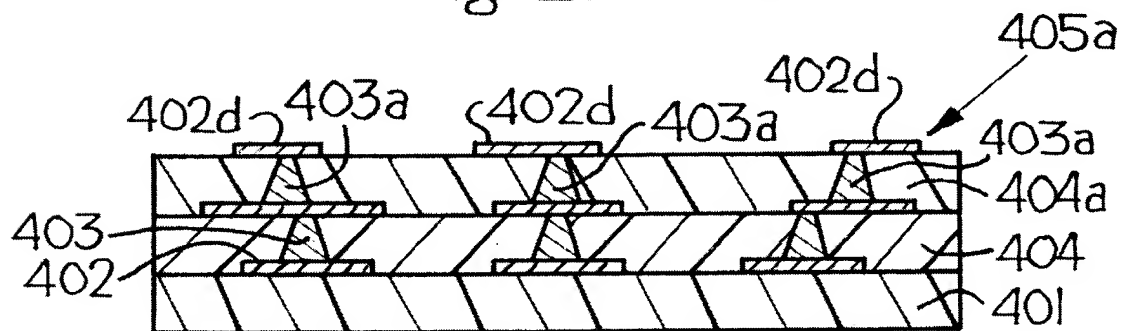


Fig. 27d (Prior Art)